

BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

DOCKET NO. 2001-411-E

IN RE: Application of Greenville County)	
Power, LLC for a Certificate of)	Direct Testimony of
Environmental Compatibility and)	Ron Kiecana
Public Convenience and Necessity)	
)	

1 **Q. Please state your name and business address.**

2 A. My name is Ron J. Kiecana. My business address is 9405 Arrowpoint
3 Boulevard, Charlotte, North Carolina 28273.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed as the Director of Fuels and Project Development at
6 Cogentrix Energy, Inc. Cogentrix Energy is the parent company of
7 Greenville County Power, LLC.

8 **Q. Please describe your educational background and professional**
9 **experience.**

10 A. I received a Bachelor of Science Degree, Finance, from Bradley University
11 and have been employed in the power and fuels industry for eleven (11)
12 years.

13 My responsibilities with Cogentrix include the development and
14 implementation of fuel plans for electric generating facilities and to assist in
15 identifying and developing sites for electric generating facilities.

16 Prior to my employment with Cogentrix, I was employed as Manager of Fuel

1 Services for Indeck Energy, where I was responsible for managing fuel for
2 operating electric generating projects.

3 **Q. What are your responsibilities with regard to the Greenville County**
4 **Power Project?**

5 A. My responsibilities with regard to the Greenville County Power Project
6 include the negotiation of Transco transportation agreement(s), the gas
7 interconnection agreement, the alternate fuel connection with Colonial
8 Pipeline (if any), and some land and easement transactions.

9 **Q. What is the purpose of your testimony in this proceeding?**

10 A. The purpose of my testimony is to present the Commission an overview of
11 fuel procurement strategy for the proposed Greenville County Power, LLC
12 ("Greenville") electric generating project. Specifically, I will address
13 transportation of natural gas to South Carolina and the Greenville County
14 Power project, strategies for acquisition of gas transportation, and the
15 significance of having secondary fuel capability at a project like Greenville
16 County Power.

17 **Q. Mr. Kiecana, what types of fuel will be used at the Greenville County**
18 **Power Project?**

19 A. Greenville County Power will primarily use pipeline quality natural gas. On
20 a secondary basis, low sulfur No.2 oil may be used up to 720 hours per year
21 from December 1 through February 15.

22 Transco's gas pipelines are adjacent to the site property and flow on average
23 3.0 billion cubic feet per day (Bcf/d) of gas. Total deliverability is close to 7.0

1 Bcfd. Greenville County Power will require less than 5% of Transco's current
2 pipeline average flow. Greenville County Power is in negotiations with
3 Piedmont Natural Gas on a Natural Gas Services Agreement that will
4 address the interconnection of the project to the Transco pipeline system.

5 **Q. What type of natural gas service will Greenville County Power require?**

6 **A.** Greenville County Power will require up to approximately 150,000 MMBtu
7 per day of peak gas service. Average daily usage will be significantly lower.
8 The type of gas service that will be required by Greenville will likely vary
9 based upon whether Greenville or a tollor ultimately becomes responsible for
10 delivering gas to the project and selling energy from the project. This likely
11 variation in natural gas service results from differences in risk profiles,
12 existing transportation assets on Transco, existing transportation and storage
13 assets elsewhere in the east, and gas supply ownership and respective
14 location.

15 **Q. Has Greenville County Power contracted for any Transco**
16 **transportation?**

17 **A.** No, we have not contracted with Transco for existing pipeline capacity. At
18 this point in the development of the project, we cannot determine definitively
19 what quantities of firm and interruptible transportation capacity Greenville
20 Power and/or its designated tollor will contract for with Transco in the future.
21 Transco is a fully subscribed pipeline, meaning that there is no unutilized firm
22 transportation capacity available for purchase on a long-term basis. Because
23 of this, I believe that Greenville Power, or its selected tolling party, will have

1 to contract for some quantity of forward haul firm transportation service to
2 serve the plant by contracting for capacity through a project expansion of the
3 Transco System. The final quantity of firm transportation service will be
4 determined at a future date when the project business structure is finalized.

5 **Q. Mr. Kiecana, how will Greenville County Power or the tollor secure its**
6 **firm transportation requirements if there is no firm transportation**
7 **currently available on Transco?**

8 A. The Transco pipeline is currently a fully subscribed pipeline, but from time to
9 time Transco does have existing forward haul firm transportation capacity
10 available into the Piedmont area of South Carolina that may be contracted
11 for by Greenville or its tollor. This occurs through a secondary market
12 mechanism, release capacity, or through the pipeline expansion process.
13 Given the demand for firm transportation along the Transco system, I do not
14 believe that there will be much firm capacity available for purchase from
15 Transco or from a releasing shipper. Accordingly, contracting for existing
16 capacity will most likely not be a reliable method for securing any firm
17 transportation requirements. A better alternative is to commit to new pipeline
18 capacity that will be developed by Transco through an expansion of its
19 system. Transco has had a strong history of successful pipeline expansions.
20 A third alternative would be to use existing backhaul transportation on the
21 Transco system. Almost all the time, Transco has existing backhaul
22 transportation capacity that also may be contracted for by Greenville County
23 Power or its tollor. We are confident that backhaul transportation service will

1 be a component of the overall fuel supply portfolio, but we do not yet know
2 how significant a component this may be due to changing northeast gas
3 supply pricing.

4 **Q. Does Transco plan on having an expansion of its system?**

5 A. Yes, in June of this year Transco introduced its Cornerstone Expansion and
6 requested interested parties to submit a nomination for transportation
7 capacity. Greenville County Power is a participant in Transco's Cornerstone
8 Open Season expansion project for a nominated maximum daily quantity of
9 140,000 MMBtu per day. Greenville County Power entered into negotiations
10 with Transco on a Precedent Agreement this month and expect to conclude
11 negotiations in December 2001. This firm transportation capacity resulting
12 from the Cornerstone Expansion could be used by either Greenville County
13 Power or by its selected tollor through assignment.

14 **Q. Why secure capacity now for a project not scheduled for operation until**
15 **2004?**

16 A. At this time, Transco anticipates forward haul Cornerstone Expansion
17 capacity to be available in the second quarter of 2004. Transco will need to
18 file for a certificate with the Federal Energy Regulatory Commission (FERC)
19 for approval of the Cornerstone Expansion and they are on schedule to
20 make this filing in the 1st quarter of 2002. We feel it is important to "pre-
21 position" the Greenville County Power project by beginning the pipeline
22 expansion process with Transco well in advance of scheduled operation so

1 there is sufficient time to work through the regulatory process and complete
2 construction.

3 **Q. Have there been other Transco expansions, and were they successful?**

4 A. Yes, Transco has a strong history of successful pipeline expansions. Recent
5 Transco expansion projects that have been announced and/or constructed
6 are as follows:

7			
8	<u>Name</u>	<u>MMBtu/d</u>	<u>In-Service</u>
9	SE 94	35,000	November 1994
10	SE 95	115,000	November 1995
11	SE96	55,000	November 1996
12	Sunbelt	145,666	November 1997
13	South Coast	204,099	November 2000
14	Sundance	236,383	May 2002 (projected)
15	Momentum	526,000	May 2003 (projected)
16	Cornerstone	Not final	May 2004 (projected)

17
18 In the event there is a delay in making incremental capacity available to
19 Greenville County Power, a firm or interruptible backhaul could be used on
20 an interim or permanent basis. This type of transportation capacity would be
21 available to Greenville County Power immediately.

22 **Q. How will Greenville County Power's secondary fuel be used?**

23 A. Greenville County Power's secondary fuel, No. 2 low sulfur distillate oil, will
24 be used as a back-up to natural gas service. More specifically, secondary
25 fuel will be used in the remote circumstance that natural gas service
26 becomes unavailable to the project due to an operating condition and during
27 peak periods when gas demand is especially high, typically during the winter
28 months. By installing and being capable of using secondary fuel, Greenville
29 will dampen the shock of peak demand for gas users in South Carolina and

1 enable more efficient use of existing Transco transportation capacity. In
2 summary, the installation of secondary fuel capability at the Greenville
3 project will add to the peak demand transportation deliverability on the
4 Transco system, at no expense to Transco or its ratepayers.

5 **Q. What impact will Greenville County Power have on the deliverability of**
6 **natural gas to South Carolina?**

7 A. I believe the impact on natural gas deliverability will be positive. If the
8 Greenville County Power project is constructed, there will likely be some
9 quantity of firm transportation capacity added to the Transco system. This
10 additional capacity is expected to increase operational flexibility and enhance
11 an already reliable system. Also, Greenville County Power's installation of
12 secondary fuel capability will increase peak demand deliverability for the
13 South Carolina delivery area.

14 **Q. Does this conclude your testimony?**

15 A. Yes, it does.
16

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Power, LLC for a Certificate of)	
Environmental Compatibility and)	Direct Testimony of
Public Convenience and Necessity)	Chip Olsen

1 **Q. What is your name and your position with Cogentrix?**

2 A. My name is Chip Olsen and I am employed by Cogentrix as Vice President of
3 Development. My business address is Cogentrix Energy, Inc., 9405 Arrowpoint
4 Boulevard, Charlotte, North Carolina 28273-8110.

5 **Q. What are your job responsibilities?**

6 A. My duties as Vice President of Development include, as the title implies,
7 responsibilities associated with the development of new facilities for the company.
8 Those facilities may include new plants such as Greenville County Power, LLC, or
9 facilities that our company has acquired through its merger with other companies or
10 through the acquisition of other companies or facilities owned by others. I am
11 currently responsible for a number of projects located all over the United States. I
12 also serve as the Project Manager for the development of Greenville County Power,
13 LLC, the plant that is the subject of these proceedings.

14 **Q. What is your educational and work background?**

15 A. I received my undergraduate training and received a Bachelor of Science degree in
16 Mechanical Engineering from the United States Merchant Marine Academy. I have

1 fifteen years experience in the energy field having worked for the Department of
2 Defense, specializing in power plants for nuclear submarines. I then went to work
3 for ten years with Wheelabrator Technologies, Inc., concentrating my efforts in the
4 area of transforming solid waste into electrical energy. I next worked for US
5 Generating, a subsidiary of Pacific Gas & Electric, for two years in which I helped
6 develop new power facilities for them. For the past two years, I have been employed
7 by Cogentrix in Charlotte.

8 **Q. Who is Cogentrix?**

9 A. Cogentrix Energy, Inc., is a company specializing in the responsible development
10 and operation of electric generating facilities that produce electricity for the
11 wholesale market. The electricity is sold under contract to companies that, in turn,
12 provide power to the retail market. With corporate headquarters in Charlotte,
13 Cogentrix has interests in 28 facilities in 14 states and internationally, with a total
14 generating capability of more than 7800 megawatts. Five of these plants are
15 currently under construction. Cogentrix also has projects totaling more than 10,000
16 additional megawatts in active development throughout the United States.
17 The company was founded in 1983, and is one of the truly independent electric
18 power producers in the United States. It ranks fourth on the list of companies that
19 are responsible for more than 50% of the power projects either under construction or
20 recently beginning commercial operations in the country. The next project to come
21 on line is the Jenks, Oklahoma, facility which is similar in most respects to the plant
22 proposed for Greenville County. A copy of the latest Annual Report of Cogentrix
23 is attached as Exhibit 1 to my testimony.

1 At Cogentrix, our motto is "A Tradition of Excellence" and that is a motto that we
2 stand behind. It is our commitment to excellence that drives my company to meet
3 or exceed the precise technical requirements, time frames, cost demands, reliability
4 expectations, and environmental concerns of not only our customers, but our
5 neighbors and the public at large.

6 **Q. What is the relationship of Greenville County Power, LLC, and Cogentrix**
7 **Energy, Inc.?**

8 A. Greenville County Power is a wholly-owned subsidiary of Cogentrix Energy, Inc.,
9 which is headquartered in Charlotte, North Carolina.

10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to support Greenville County Power's Application
12 for a Certificate of Environmental Compatibility and Public Convenience and
13 Necessity to construct and operate a generating plant for the production of electricity
14 in Greenville County, South Carolina, and to answer any questions regarding the
15 design and expected operations of the facility. In my testimony, I will describe how
16 Cogentrix Energy decided to build a facility at this location. I will also describe the
17 proposed Greenville County Power generating facility, how it will be operated, and
18 how it can benefit Greenville County.

19 The company witnesses who will follow me will describe the environmental aspects
20 of the facility and the steps Greenville County Power has taken to assure a reliable
21 source of natural gas for the facility without adversely affecting the supply or price
22 of natural gas to South Carolina Consumers.

23 **Q. What is the nature of the Greenville County Power project?**

A. Greenville County Power, LLC proposes to construct and operate an electrical power generation facility with a nominal generating capacity of approximately 810 megawatts (MW) in Greenville County, South Carolina. This facility will be located near the intersection of SC Highway 418 and Fork Shoals Road in Greenville County.

6 The facility will consist of three combined-cycle combustion turbine generators
7 (CTGs), each matched to a heat recovery steam generator with duct burners. Other
8 air emission source equipment will include three fuel preheaters, one auxiliary boiler,
9 three cooling towers, one standby diesel generator, and a diesel fire water pump. The
10 CTGs will be fired with natural gas with distillate fuel oil as backup. The natural gas
11 will be supplied from the Transco Pipeline that crosses the property where the project
12 is being built, and the distillate fuel will be supplied from the Colonial Pipeline
13 which also crosses the property. Greenville County Power is also designing an
14 unloading area for truck shipments of distillate fuel. A fuel storage tank with a
15 capacity of 1.2 million gallons is also a part of the project. The project will utilize
16 the latest in environmental control technologies to control the emissions and
17 discharges from the facility. The environmental issues are being reviewed by DHEC
18 at the present time and we expect permits to be issued soon.

19 **Q. How will the Greenville County Power facility be connected to transmission**
20 **lines?**

21 A. The facility will interconnect with existing 500 kV transmission lines of Duke
22 Energy, which are located across Fork Shoals Road from the project site.
23 Interconnection will be provided by a single circuit bus line between the generating

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1 station and Duke Energy's Harrison Bridge Switching Station. Duke is currently
2 designing and plans to construct the Harrison Bridge Switching Station to support
3 interconnection of the Greenville Generating Company, LLC, facility approved by
4 the Commission in March 2001. The Harrison Bridge Switching Station design will
5 be modified to accommodate an interconnection from Greenville County Power.

6 **Q. How will the Greenville County Power project fit into the Duke system?**

7 A. Through its interconnection to the Duke Power transmission line system, the
8 Greenville County Power project will add approximately 810 MW of needed
9 generating capacity to the South Carolina electric systems. Electric utilities serving
10 South Carolina include the investor-owned utilities Duke Energy, Carolina Power
11 and Light Company, and South Carolina Electric and Gas Company and the State-
12 owned utility, South Carolina Public Service Authority. These four utilities serve
13 approximately 95% of the total electric load in South Carolina, with various
14 cooperative and municipal systems serving the remainder. Duke and CP&L also
15 serve the majority of electric loads in North Carolina. All of these utilities, when
16 combined with other electric utilities in North Carolina and Virginia, comprise the
17 VACAR sub-region (Virginia and the Carolinas) of the Southeastern Electric
18 Reliability Council (SERC).

19 The sub-regions of SERC have recently experienced some of the highest economic
20 and population growth in the eastern half of the United States. Since 1996, electric
21 loads in SERC have grown at approximately 2.8% annually, with the VACAR sub-
22 region experiencing the highest growth in the region at 3.2%. Loads forecast by
23 electric utilities in the region are expected to maintain a relatively high average

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1 annual growth of approximately 2.5% through 2010. Based on the most recent
2 Regional Electric Supply and Demand Projections (EIA-411) report filed by the
3 electric utilities in the SERC region, dated June 15, 2001, anticipated growth in peak
4 demand, when combined with planned generating unit retirements and re-rating and
5 planned firm purchases and sales, will create a need for over 38,000 MW of new
6 capacity in SERC by 2010, with over 17,000 MW of this capacity being needed in
7 VACAR.

8 In order to satisfy this need for future generating capacity, utilities throughout the
9 region are planning a number of generating projects, with these projects currently in
10 various stages of development. Committed resource plans by electric utilities in
11 VACAR are projected to satisfy only about 30% of the total need by 2010, resulting
12 in approximately 12,000 MW of future capacity need for which resources have not
13 yet been designated or committed. Independent project developers like Greenville
14 County Power have stepped in to develop generating projects to fulfill the future
15 need not currently satisfied by planned utility projects. However, even once non-
16 utility generation projects are considered, approximately 2000 MW of future capacity
17 needs remain unmet in VACAR by 2004, increasing to approximately 9800 MW by
18 2010. The Greenville County Power facility can help satisfy a portion of this future
19 need.

20 **Q. Please describe your activities regarding Greenville County Power, LLC.**

21 **A.** As Project Manager for the Greenville County Power project, my duties began with
22 an analysis of the transmission line capacity and usage in the VACAR region. Our
23 first inquiry is whether or not the region being studied has a need for additional

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1 electric generative capacity. I studied electric power flows and determined which of
2 the electric transmission lines in the region were underutilized and had extra
3 capacity. I then overlaid those available transmission lines with locations that had
4 access to a natural gas transmission line. This analysis led me to six potential
5 locations in the VACAR region to examine more thoroughly.

6 I then followed our company's standard practice of securing options on the sites,
7 working closely with community leaders and residents, and consulting with our
8 customers and regulatory authorities. Our goal in this process is to resolve the
9 financial, environmental and local community issues that are present at all sites as
10 quickly as possible. These inquiries included determining whether the potential
11 locations had (1) access to existing electric transmission lines; (2) access to an
12 existing gas supply system; (3) acceptable land use patterns in the vicinity of the
13 proposed site; (4) site constructability; (5) availability of a water supply for cooling
14 and a water discharge source; (6) site access; and (7) the availability of the land.

15 The Greenville County site, as well as one in Virginia, met all of the criteria listed
16 above. First, there is an existing 500 KV line operated by Duke Power Company that
17 crosses the property in question. Second, Transco has a natural gas pipeline that
18 crosses the property. Also, the Colonial Pipeline will supply the distillate fuels
19 called for in the project plans. Third, the land use patterns in the area of the site were
20 compatible with our planned use of the property. Fourth, the site has all of the
21 physical characteristics needed to construct the plant. For example, the building site
22 is located 60 feet below the grade of the road fronting the property and the site is
23 surrounded by 120-foot tall trees. This topographical feature minimizes the visual

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1 impact of the site to the general public. Fifth, the needed process water supply is
2 available through the Western Carolina Regional Sewer Authority plant on Mauldin
3 Road, as well as potable water through the Greenville Water System. The
4 accessibility of the Reedy River provides a venue for discharging process wastewater
5 from the plant. Sixth, the road access to the plant is excellent, and as I became
6 personally involved in the securing of options to buy the land, I found that the
7 necessary land was available.

8 In sum, the Greenville County site satisfies all of the physical and technical criteria
9 that we set for our projects. In addition, we commissioned a fatal flaws analysis that
10 encountered no significant environmental problems that would make the issuance of
11 the necessary permits by DHEC difficult to achieve. Lastly, we have conducted
12 community informational meetings in the Jenkins Estates and Harrison Hills
13 subdivisions. Everyone in those neighborhoods was invited to these meetings.
14 Though we did not satisfy the concerns of all of those who appeared, we are
15 confident that the questions of the majority were satisfactorily answered. A copy of
16 the handouts used at those meetings is attached as Exhibit 2 to my testimony.

17 **Q. What steps in the process of developing this project have you completed?**

18 A. We have options to purchase the land necessary to build the project. We have
19 purchased the gas turbines that will be installed at the Greenville facility. Those gas
20 turbines, by the way, will be manufactured at the General Electric facility in
21 Greenville County. We have obtained the necessary zoning that will permit the
22 construction of the plant. We have engaged environmental consultants to assist us
23 with the DHEC permitting process, and permit applications have been submitted.

1 Our consultants and our company are currently working with the DHEC staff on the
2 details of those permits. We have applied for and are in the process of negotiating
3 a fee in lieu of taxes with the Greenville County Council and its staff, and this
4 application with the South Carolina Public Service Commission is pending. Lastly,
5 the studies performed by Duke Power Company to ensure that our facility will not
6 have an adverse impact on the reliability of their transmission system have been
7 completed.

8 **Q. How do you know that the existing Duke Power system will not be adversely**
9 **affected by your project?**

10 A. The studies done by Duke Power Company on this subject show that the upgrades
11 that will be necessary and will be paid for by Cogentrix actually increase the
12 reliability of their transmission line system. The Duke System Impact Study
13 (attached to my testimony as Exhibit 3), the Interconnection Study (attached to my
14 testimony as Exhibit 4), and the Generator Facility Study (attached to my testimony
15 as Exhibit 5) have all been completed. The cost of the upgrades to the Duke System
16 is approximately \$10 million, an obligation of Cogentrix, not the ratepayers of the
17 Duke System or the citizens of South Carolina.

18 **Q. Are the concerns expressed by Greenville County citizens any different than**
19 **those raised at the other facilities constructed by your company?**

20 A. No, the pattern of questions and concerns is the same throughout the country. Let me
21 take a few moments to outline the typical concerns and the answer to those concerns.

22 **Q. Will the plant be unsightly?**

1 A. No. As I have testified earlier, the actual building will be located approximately 60
2 feet below the grade of Fork Shoals Road, the roadway fronting the property. The
3 site is surrounded by 120-foot tall trees, making the actual building and the attendant
4 stacks nearly invisible from the road. There are nine computer-generated photographs
5 depicting the Greenville County plant superimposed on the actual site. At six of the
6 locations, the plant cannot be seen at all, and on the other three, there is a limited
7 view of the buildings. These photos are also a part of the record before the
8 Commission and they graphically demonstrate that the visual impacts from this site,
9 if any, are acceptable.

10 **Q. How much light can be expected from the plant site?**

11 A. Plant lighting in outdoor areas will be minimized, but will be provided in accordance
12 with applicable laws and regulations for safe access. The use of floodlighting will
13 be kept to a minimum. Directional and shielded lighting will be used to minimize
14 the "broadcast" of light into the area surrounding the site. If allowed by regulation,
15 lighting in areas that could be viewed from off-site will be switched to enable the
16 light to be turned off when not required.

17 The topography of the selected site will allow the plant to be located at levels
18 significantly below adjoining road levels so light levels near the plant site are not
19 expected to be great.

20 **Q. Will the plant be loud?**

21 A. No. First, the facility will be designed and constructed to meet all local and state
22 regulations for the control of noise. Our studies at similar plants within the
23 Cogentrix system have shown that the anticipated sound level from the facility when

operating is expected to be approximately 65 decibels (dBA) at a distance of 400 feet from the operating equipment. This level of sound is equivalent to the sound levels heard by a passenger inside a car traveling 35 miles per hour, or the noise associated with a refrigerator in one's home. The distance from the Greenville County Power plant to the property line will be greater than 400 feet, so the noise associated with the operation of the plant would be less than 65 dBA at the closest offsite point where someone might hear the plant.

Q. Will land values go down?

A. No, and we have the experience to show it. Concerns in this area were initially raised by neighbors of the proposed Jenks, Oklahoma, plant two years ago. Remember that the Jenks facility is virtually identical to the proposed plant for Greenville County. Cogentrix commissioned a local real estate firm to investigate the market for new homes and the resale of existing homes within a five square mile area around the Jenks plant. This investigation looked at the market from a time period two years before the project was announced through March of 2001. The results were that there were no negative impacts on property values and there was no slow down in the sales of homes or property in the vicinity of the plant. A copy of this study is attached as Exhibit 6.

Q. What about air pollution and air quality around the proposed plant?

A. First, the visible emissions from the plant would be only in the form of a water vapor plume from the cooling towers or stacks. The visibility of this plume will be a direct result of the atmosphere's ability to absorb moisture at any given time. For example, during periods of cool, damp weather, there will be a visible water vapor plume. For

1 most other periods, the visible plume will be minimal. Steps will also be taken in the
2 operation of the plant to minimize the visibility of this water vapor.

3 Other than water vapor, it is important to recognize that the project will primarily use
4 clean-burning natural gas and will therefore produce the same types of emissions, but
5 in higher quantities, as are typical from residential natural gas stoves and furnaces.
6 The project will use the Best Available Control Technology to control these
7 emissions from the plant. These will include the use of dry, low-Nox burners in the
8 combustion turbine, and post-combustion selective catalytic reduction (SCR) for the
9 control of NO_x emissions.

10 The addition of the Cogentrix facility to Greenville will generate approximately
11 372.5 tons of NO_x per year when burning natural gas. While this number at first
12 blush seems large, it pales in comparison to the 71,632.54 tons per year of NO_x
13 generated in the five-county area that forms the I-85 corridor.

14 The primary use of natural gas as a fuel, combined with the combustion and post-
15 combustion environmental controls installed within the facility, will make the plant
16 one of the cleanest power generation facilities in the Southeast and among the
17 cleanest in the world. This is also the environmental commitment of Cogentrix – to
18 meet or exceed any and all regulatory requirements imposed upon the plant by
19 DHEC or any other regulatory body. The details of the air quality permit applied for
20 by Cogentrix have yet to be finalized by the DHEC staff. However, this Commission
21 can rest assured that Cogentrix will meet or exceed those permit limits and that
22 DHEC has the statutory and regulatory authority to ensure that the requirements will
23 be met.

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1 **Q. Will the Reedy River be adversely impacted?**

2 **A. No. We believe that the overall effect of the Cogentrix facility will benefit the water**
3 **quality in the Reedy River.**

4 The plant will require both potable and process or cooling waters. The process water
5 will be used for boiler makeup, cooling tower makeup, and plant services. The
6 expected use will average approximately 4.5 million gallons per day (MGD) with a
7 maximum daily amount of approximately 8.0 MGD. This water will be provided
8 through a combination of treated effluent from the Western Carolina Regional Sewer
9 Authority plant on Mauldin Road and of potable water purchased from the Greenville
10 Water System. Cogentrix is currently negotiating the terms of the water purchase
11 agreements, but several items have become clear.

12 The effluent from the Mauldin Road facility is currently being discharged into the
13 Reedy River. Once an 8-mile-long pipeline is completed to connect the Mauldin
14 Road facility with the Cogentrix plant, that effluent will be diverted through the
15 pipeline to Cogentrix where it will be further treated, used as makeup water, and then
16 treated again and discharged back into the Reedy River. During drought or arid
17 conditions, or under conditions where the required amount of effluent is not
18 available, the plant will have the flexibility to augment the effluent by purchasing
19 potable water from the Greenville Water System, thereby discharging even cleaner
20 water to the Reedy. This plan is consistent with the goals of the WCRSA to reuse
21 the wastewater within its system and also to improve the water quality in the Reedy
22 River. It also benefits Cogentrix in that it has two sources of process water to choose
23 from as conditions warrant. Moreover, the plan benefits the public in that the

1 pipelines and other upgrades to the water system and the WCRSA systems will be
 2 paid for by Cogentrix. Those upgrades will increase the reliability of those systems
 3 and will also permit those entities to offer upgraded and improved service to their
 4 existing and new customers.

5 Again, Cogentrix has applied for and is working with DHEC on the specific terms
 6 of the NPDES discharge permit for the facility. The Commission can be assured that
 7 Cogentrix will meet or exceed those permit limits and that DHEC has the statutory
 8 and regulatory authority to enforce those limits.

9 **Q. Will our electric power rates go up as a result of this project?**

10 A. No. If anything, the addition of generating capacity will increase the supply of
 11 electricity and tend to keep the costs down. The results of the study performed by
 12 the R. W. Beck Company on the need for additional electric generating capacity in
 13 the VACAR region is clear – there is a need for it and the Cogentrix facility will help
 14 fill that need.

15 **Q. Will the project impact residential natural gas pricing or the availability of**
 16 **residential natural gas?**

17 A. No. There are adequate gas supplies and transportation available for the project
 18 without affecting residential gas pricing and availability. There is an existing natural
 19 gas pipeline on the project site. We expect gas supplies to steadily increase in the gas
 20 producing regions and as the economy moderates, both demand for gas and the price
 21 of that gas are expected to moderate as well.

22 **Q. Is the Cogentrix project needed?**

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1 A. A study performed by the R. W. Beck Company is a part of the record before this
2 Commission and that study concludes very clearly that there is a pressing need for
3 facilities like the one proposed by Cogentrix. Duke Power has endorsed the concept
4 of merchant power plants that can supply their electrical needs without Duke having
5 to make the capital investments necessary to create all of their own generating
6 capacity. In the case of a merchant power plant like Cogentrix, the investors of
7 Cogentrix are taking the risks associated with constructing a power plant, not the
8 ratepayers of the Duke Power Company. If the project turns out not to be viable or
9 loses money, that loss would not fall on the ratepayers of Duke Power.

10 **Q. What about the Orion Project and the others lined up behind Cogentrix in the**
11 **Duke Power Queue?**

12 A. Pursuant to the regulations of FERC, Duke Power has established a queue at its
13 interconnect location in the Fork Shoals area. Greenville Generating Company, a
14 company whose Certificate to operate a peak generating facility was granted by this
15 Commission in March of 2001, is number one in the Queue. Cogentrix is number
16 two, while Orion is number three, and so on. The place in the Queue is important
17 because the competing companies must pay for any upgrades to the Duke system that
18 will be necessary by their connection to the line. The cost to Cogentrix as number
19 two will be \$10 million. The estimated cost of Orion should be much higher, thereby
20 possibly making the interconnection costs prohibitive. The point is that once the
21 Greenville County Power plant is built, in my opinion it is highly likely that no other
22 plants will be constructed.

23 **Q. What is the economic benefit to Greenville County and to South Carolina?**

- 1 A. The proposed facility will represent an overall investment of \$450 million, will
2 provide significant tax revenues to Greenville County, will create approximately 30
3 full-time jobs with an annual payroll over \$1.5 million, and will create an average of
4 300 to 500 construction jobs over the two-year construction period. The direct and
5 indirect local impact from the project will be \$260 million during the two-year
6 construction period and \$300 million over the course of the first 20 years of plant
7 operations. This totals a positive economic impact to the community of \$560 million
8 over the first 22 years of construction and operation of the facility.
- 9 **Q. What are the expected tax revenues to Greenville County?**
- 10 A. The negotiated fee in lieu of taxes will generate \$3.2 million in property tax revenue
11 during the first year of operation, now scheduled for 2004-2005. The fee in lieu of
12 taxes would go down in subsequent years as the equipment depreciates in value, but
13 Greenville County will receive \$22.2 million in tax revenues over the next 20 years.
14 The current taxes on the undeveloped property are less than \$1,000 annually.
- 15 **Q. Does the project have the support of Greenville County Council and the other**
16 **leaders of the County?**
- 17 A. Yes. County Council Chair Dozier Brooks has written a letter in support of the
18 project, and it also has the support of the Greenville Chamber of Commerce, the
19 Western Carolina Regional Sewer Authority, the City of Greenville, etc. The taxes
20 that will be generated are essential to the continued growth of the County, as well as
21 the Greenville County School District. The revenues will be generated from an
22 industrial investment employing approximately 30 employees. While the expected
23 annual payroll for the plant is expected to be in excess of \$1.5 million, the plant will

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1 not be creating a need for services that would require the expenditure of large sums
2 of taxpayer dollars. This creates a "win-win" situation for Greenville County.

3 **Q. When is the Greenville County Power facility proposed to be in operation?**

4 A. It is anticipated that the Greenville County Power facility will begin construction in
5 April, 2002, and will be in operation in April, 2004.

6 **Q. Does this conclude your testimony?**

7 A. Yes, it does.